### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

## SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-001274

Address: 333 Burma Road **Date Inspected:** 16-Aug-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shangha

**Quality Control Contact:** William (Bill) Oak **Quality Control Present:** Yes No

**Material transfer:** Yes No N/A **Sampled Items:** Yes No N/A **Stock Transfer:** N/A OK to Cut: N/A Yes No Yes No **Rebar Test Witness:** N/A **Delayed/Cancelled:** Yes N/A Yes No No

Other: Coatings Inspection

**Bridge No:** 34-0006 Office, Lift 3 East, Cross Beam #3, Bikeway **Component:** 

**Bid Item:** Lot No: 77, 78, 79 B265

### **Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following: Cross Beam #3

Repairs and re-application of Interfine 979 topcoat to external surfaces were requested by ZPMC. Inspection revealed re-abrasive blasting required prior to application of Interfine 979 full finish coating. ZPMC cancelled inspection to amend repair work.

Lift 3 East

Repairs were performed on external surfaces MEK testing and Pencil hardness testing passed and ZPMC then applied "mist" coat of Interfine 979 to prepared surfaces.

Bikeway Brackets

A preliminary final inspection was performed to outline and ascertain repairs if required prior to Caltrans Engineer Bill Howe inspection. Brackets checked were: BK001-004, BK001-005, BK001-007

Miscellaneous Metal

Base metal surfaces of tower splice plates were de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting. Splice plates codes as follows: SA102-W, SA365-W, SA366-W, SA367-W, SA368-W.

Weld seams were re-abrasive blasted and Interzinc 22 re-applied on the following surface areas: 3AE/2BE, 3BE/4AE, profile amplitude was 70-82um.

Lift 4 East

# SOURCE INSPECTION REPORT

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Traveler brackets affixed to this Segment received mist coat application of Interfine 979. Bracket locations were for PP# 24, 25, 26, & 28.

Lift 4 East

Suspender Bracket affixed to this segment inadvertently had Interfine 979 topcoat applied to it without the converter being mixed with the base, ZPMC personnel removed the improperly proportioned applied coating via scrapers (SP-1) and followed by solvent cleaning to remove residual coating (SP-1) then re-applied properly mixed Interfine 979 to affected area. Incident report was submitted for this work. Caltrans QA Lumley discovered the problem and observed amendment.

Lift 3 East

Bottom plate bolted connection of the cross beam assembly area was "mist "coated with Interfine 979 and adjacent terminus of existing coating around periphery of bolted areas on the bottom plate also were "mist" coated. Cross Beam #3

Areas discovered to have low DFT (dry film thickness) were abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied.

Office

Attend to project documentation and reporting.

Miscellaneous Metal

Splice plates transported from Trial assembly were re-abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied to all areas.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representatives were available for inspections and consultation.

### **Summary of Conversations:**

No relevant conversations on this day.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Lumley, James	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer